



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-1013; Project Identifier MCAI-2020-01530-T]

RIN 2120-AA64

Airworthiness Directives; BAE Systems (Operations) Limited Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive (AD) 2017-12-08, which applies to all BAE Systems (Operations) Limited Model BAe 146-100A, -200A, and -300A airplanes; and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A airplanes. AD 2017-12-08 requires revising the maintenance or inspection program, as applicable, to incorporate new or revised structural inspection requirements. Since the FAA issued AD 2017-12-08, the FAA has determined that new or more restrictive airworthiness limitations are necessary. This proposed AD would require revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact BAE Systems (Operations) Limited, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; email RApublications@baesystems.com; Internet <http://www.baesystems.com/Businesses/RegionalAircraft/index.htm>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-1013; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Todd Thompson, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3228; email todd.thompson@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2021-1013; Project Identifier MCAI-2020-01530-T” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend the proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this proposed AD.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Todd Thompson, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3228; email

todd.thompson@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA issued AD 2017-12-08, Amendment 39-18923 (82 FR 27414, June 15, 2017) (AD 2017-12-08), for all BAE Systems (Operations) Limited Model BAe 146-100A, -200A, and -300A airplanes; and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A airplanes. AD 2017-12-08 requires revising the maintenance or inspection program, as applicable, to incorporate new or revised structural inspection requirements. AD 2017-12-08 resulted from a determination that new or revised structural inspection requirements are necessary. The FAA issued AD 2017-12-08 to address fatigue cracking of certain structural elements, which could adversely affect the structural integrity of the airplane.

Actions Since AD 2017-12-08 Was Issued

Since the FAA issued AD 2017-12-08, the FAA has determined that new or more restrictive airworthiness limitations are necessary.

The Civil Aviation Authority (CAA), which is the aviation authority for the United Kingdom, has issued CAA AD G-2021-0011, dated October 8, 2021 (CAA AD G-2021-0011) (also referred to after this as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for all BAe 146 and AVRO 146-RJ airplanes. You may examine the MCAI in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-1013.

This proposed AD was prompted by a determination that new or more restrictive airworthiness limitations are necessary. The FAA is proposing this AD to address fatigue cracking of certain structural elements, which could adversely affect the structural integrity of the airplane. See the MCAI for additional background information.

Related Service Information under 1 CFR Part 51

BAE Systems has issued Chapter 05 of BAe 146 Series/AVRO 146-RJ Series Aircraft Maintenance Manual, Revision 132, dated August 18, 2021. This service information describes airworthiness limitations, including life limits, maintenance tasks, and CDCCLs.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI and service information referenced above. The FAA is proposing this AD because the FAA evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Proposed Requirements of this NPRM

This proposed AD would retain certain requirements of AD 2017-12-08. This proposed AD would require revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations.

This proposed AD would require revisions to certain operator maintenance documents to include new actions (e.g., inspections). Compliance with these actions is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by this proposed AD, the operator may not be able to accomplish the actions described in the revisions. In this situation, to comply with

14 CFR 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (k)(1) of this proposed AD.

Costs of Compliance

The FAA estimates that this proposed AD affects 30 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

The FAA estimates the total cost per operator for the retained actions from AD 2017-12-08 to be \$7,650 (90 work-hours x \$85 per work-hour).

The FAA has determined that revising the maintenance or inspection program takes an average of 90 work-hours per operator, although the agency recognizes that this number may vary from operator to operator. Since operators incorporate maintenance or inspection program changes for their affected fleet(s), the FAA has determined that a per-operator estimate is more accurate than a per-airplane estimate. Therefore, the agency estimates the average total cost per operator to be \$7,650 (90 work-hours x \$85 per work-hour).

The FAA estimates the total cost per operator for the new proposed actions to be \$7,650 (90 work-hours x \$85 per work-hour).

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by:

- a. Removing Airworthiness Directive (AD) 2017-12-08, Amendment 39-18923 (82 FR 27414, June 15, 2017); and
- b. Adding the following new AD:

BAE Systems (Operations) Limited: Docket No. FAA-2021-1013; Project Identifier MCAI-2020-01530-T.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2017-12-08, Amendment 39-18923 (82 FR 27414, June 15, 2017) (AD 2017-12-08).

(c) Applicability

This AD applies to all BAE Systems (Operations) Limited airplanes, certificated in any category, identified in paragraphs (c)(1) and (2) of this AD.

(1) Model BAe 146-100A, -200A, and -300A airplanes.

(2) Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 05, Time Limits/Maintenance Checks.

(e) Reason

This AD was prompted by a determination that new or more restrictive airworthiness limitations are necessary. The FAA is issuing this AD to address fatigue cracking of certain structural elements, which could adversely affect the structural integrity of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Revision to the Maintenance or Inspection Program, with No Changes.

This paragraph restates the requirements of paragraph (i) of AD 2017-12-08, with no changes. Within 90 days after July 20, 2017 (the effective date of AD 2017-12-08):
Revise the maintenance or inspection program, as applicable, to incorporate new and revised limitations, tasks, thresholds, and intervals using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA.

Note 1 to paragraph (g): An additional source of guidance for the actions specified in paragraph (g) of this AD can be found in BAe 146/AVRO 146-RJ Airplane Maintenance Manual, Revision 112, dated October 15, 2013.

Note 2 to paragraph (g): An additional source of guidance for the actions specified in paragraph (g) of this AD can be found in Corrosion Prevention Control Program (CPCP) Document No. CPCP-146-01, Revision 4, dated September 15, 2010.

Note 3 to paragraph (g): An additional source of guidance for the actions specified in paragraph (g) of this AD can be found in Supplemental Structural Inspections Document (SSID) Document No. SSID-146-01, Revision 2, dated August 15, 2012.

Note 4 to paragraph (g): An additional source of guidance for the actions specified in paragraph (g) of this AD can be found in Maintenance Review Board Report Document No. MRB 146-01, Issue 2, Revision 19, dated August 2012.

Note 5 to paragraph (g): An additional source of guidance for the actions specified in paragraph (g) of this AD can be found in BAE Systems (Operations) Limited Inspection Service Bulletin ISB.53-237, Revision 1, dated April 2, 2013.

(h) Retained No Alternative Actions, Intervals, and/or Critical Design Configuration Control Limitations (CDCCLs), with No Changes

This paragraph restates the requirements of paragraph (j) of AD 2017-12-08, with no changes. Except as specified in paragraph (i) of this AD: After accomplishing the revision required by paragraph (g) of this AD, no alternative actions (e.g., inspections), intervals, and/or CDCCLs may be used, unless the actions, intervals, and/or CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the

procedures specified in paragraph (k)(1) of this AD.

(i) New Maintenance or Inspection Program Revision

Within 90 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate the information specified in Chapter 05 of BAe 146 Series/AVRO 146-RJ Series Aircraft Maintenance Manual, Revision 132, dated August 18, 2021. The initial compliance time for doing the tasks is at the time specified in Chapter 05 of BAe 146 Series/AVRO 146-RJ Series Aircraft Maintenance Manual, Revision 132, dated August 18, 2021, or within 90 days after the effective date of this AD, whichever occurs later. Accomplishing the revision required by this paragraph terminates the actions required by paragraph (g) of this AD.

(j) New No Alternative Actions, Intervals, or CDCCLs

After the existing maintenance or inspection program has been revised as required by paragraph (i) of this AD, no alternative actions (e.g., inspections), intervals, or CDCCLs may be used unless the actions, intervals, and/or CDCCLs are approved as an AMOC in accordance with the procedures specified in paragraph (k)(1) of this AD.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, Large Aircraft Section, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the Large Aircraft Section, International Validation Branch, send it to the attention of the person identified in paragraph (l)(2) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(i) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(ii) AMOCs approved for AD 2017-12-08 are approved as AMOCs for the corresponding provisions of this AD.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA; or the Civil Aviation Authority (CAA); or BAE Systems (Operations) Limited's CAA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(l) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) CAA AD G-2021-0011, dated October 8, 2021, for related information. This MCAI may be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-1013.

(2) For more information about this AD, contact Todd Thompson, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3228; email todd.thompson@faa.gov.

(3) For service information identified in this AD, contact BAE Systems (Operations) Limited, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; email RApublications@baesystems.com; Internet <http://www.baesystems.com/Businesses/RegionalAircraft/index.htm>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Issued on November 17, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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